The Institution of Engineers, Australia; Sydney Division
Engineering Heritage Committee

ORAL HISTORY PROGRAM

INTERVIEWEE :	**Douglas Taylor**	TAPE NUMBERS :	**IEA SYD FJ 15**
INTERVIEWER :	**Frank Jackson**		**IEA SYD FJ 16**
INTERVIEW DATE :	**9 October 2000**	NUMBER OF TAPES :	**2**
RESTRICTION ON USE :	**None**		

INTERVIEW TAPE LOG

This interview took place at his home at 2/128 Lower St George's Crescent, Drummoyne NSW, on 9th October 2000.

This log was prepared on a Sanyo TRC08080 Memo-Scriber

This interview is part of the Oral History Project of the Engineering Heritage Committee of the Sydney Division the Institution of Engineers, Australia.

Tape Log

Tape : IEA SYD FJ 15 , Side A		
COUNT	**SUBJECT**	**NAMES & KEYWORDS**
001	Introduction	
006	Birth, family background. Father lecturer in agriculture at Hurlstone Agricultural College. One younger brother – became engineer in Public Works Department. Lived in Service Avenue, South Ashfield	Douglas James Taylor Hurlstone Agricultural College Opera House State Office Block Westmead Hospital
	Early interest – 2UW Meccano and Hornby Train Club – describes activities of Club. His peak Meccano achievement was a working model of car chassis at age 13. Early radio listening – near-loss of Kingsford Smith in early 1930s	2UW Meccano & Hornby Train Club Charles Kingsford Smith 'Southern Cross'
050	Secondary school – Summer Hill Intermediate High, about 1928. Enjoyed science, hated compulsory Latin After Intermediate, to Canterbury High – one year, to September at end of 4th year – else would be too old to enter apprenticeship in Marine Engineering Enjoyed Economics & Mechanics. Notable science teacher – nicknamed 'Billy Bunsen'	Summer Hill Intermediate High Canterbury High 'Billy Bunsen' Apprenticeship – entry age limit
	Always had interest in engineering and Marine – as child, riding on Manly ferry to watch engines – coal fired triple-expansion steam engines – Later 4-cylinder triple-expansion engines fired on coal-tar residue from Gasworks. Balanced on Yarrowslick & Tweedy principle – perfectly balanced and silent Was too shy to talk to crew.	Manly Ferries "Dee Why", "Curl Curl" Yarrowslick & Tweedy
107	Sea Cadets – in 4th Year – Kelly St Drummoyne, later on Snapper Island – building depot there - named 'Sydney' Depot, after WW1 HMAS 'Sydney' Learned sailing, rowing , knots, signalling 3d a week and buy your own uniform – full navy sailor's rig Good character training – strict discipline	Sea cadets Birkenhead Point 'Sydney' Depot Kelly Street, Drummoyne Snapper Island HMAS 'Sydney'
134	Depression era – getting apprenticeship difficult, as half of fleets laid up. Fortunate to have choice between Sydney Ferries and Howard Smiths repair depots – chose the latter –bigger ships and better experience No formal apprentice training – more like cheap labour. Mostly shop work, and occasional work on board a ship.	Sydney Ferries Howard Smith Cockatoo Island – apprentice school
	Sydney Technical College – Diploma course (Father's decision – 'do it properly') Course work not easy – 4 nights a week, then studied with friend nearby on Sundays.	Sydney Technical College
	Shipboard experience – very difficult to obtain post in Sydney – Only option for travel to London was as passage-working engineer - no watches, but maintenance work during days.. (February 1938)	passage-working engineer
195	Arrived in London – met by Port Line superintendent engineer and offered post as 6th engineer. Some coastal trips on steam ships – 'Port Auckland' and 'Port Adelaide'. – wanted post on motor ship.	Port Line 'Port Auckland' 'Port Adelaide'
215	Differences in marine power – Port Line 50% coal-burning steam ships, 50% motor ships. Steamers – some turbine, some triple-expansion reciprocating , with exhaust turbine for additional power - all twin-screw. Motor ships – most were opposed piston Doxford diesels, and two	Port Line Baurwach exhaust turbine Doxford diesels Sulzer diesels

	with Sulzer engines. Describes porting arrangements of Doxford engines.	
260	Effect of wartime conditions on marine trade – 1 in 5 casualty rate among British ships (higher than in armed services). Sept 1939 – mid-Atlantic in 'Port Chalmers', heading for New Zealand via Panama Canal, when 'Athenia' sunk on first day of war. 'Port Chalmers' had gun fitted in Melbourne, the sailed for England via Capetown – missed by 'Graf Spee' (sank the ships ahead and astern of his in South Atlantic).	'Port Chalmers' 'Athenia' 'Graf Spee' Panama Canal Capetown
	Cargoes – refrigerated cargoes for England, machinery outbound.	
300	London County Council School of Marine Engineering in Poplar, London. Boarded in East End while he studied.	London County Council School of Marine Engineering London
	Qualifications (Certificates) – 1st Class Motor Certificate (Steam or Motor), then qualifying time at sea, including qualifying time on alternate type of ship (steam for Motor Cert, and vice versa) The First Class Certificate, and finally Extra Chief's Certificate (voluntary, for 'superior types') Mix of practical experience then formal studies. Made sure he passed all exams first time.	1st Class Motor Certificate First Class Certificate Extra Chief's Certificate
348	After 2nd Engr (Motor) Cert – changed companies to Blue Star Line – wanted experience with different kinds of diesel. Posted to 'Sydney Star'. Another reason engioneers changed lines was to see different part of the world.	Copenhagen Blue Star Line 'Sydney Star'
	End of Side A	

Tape : IEA SYD : FJ 15 , Side B		
COUNT	**SUBJECT**	**NAMES & KEYWORDS**
000	Start of tape	
001	Introduction	
	Doxford opposed piston diesel engines –description of operation and design	'Doxford' marine engines
016	Voyage to India – 'Sydney Star'- with munitions Liverpool to Middle East via Durban, South Africa, then through Red Sea and Suez Canal. Then to India (Bombay) – on return to Australia hospitalised in Melbourne with hepatitis. When recovered – Blue Star offered to send him to UK as 'distressed British sailor' – refused	'Sydney Star' Durban Suez Canal Bombay hepatitis Blue Star Line 'distressed British sailor'
	Joined Huddart Parker on 'Wanganella' – to WA and back, then converted to hospital ship. Singapore before fall, the trips to Middle East.	Huddart Parker 'Wamganella' Singapore
043	Obtained Chief's Certificate in Sydney, while on 'Wanganella'.	Customs House, Sydney
	4 or 5 trips on 'Wanganella', then left to get steam experience to qualify for steam endorsement – applied to E&A Line (AUSN), then Huddart Parker offered a position on 'Nairana' - steam passenge ship ex Melbourne to Tasmania. (Refused post on E&A 'Nankin' which was later captured by Japanese and crew killed or P.O.W.)	E & A Line Huddart Parker 'Nairana' 'Nankin'
089	On 'Corio' – coastal convoy attacked by Japanese submarines – hit by torpedo which failed to explode.	'Corio' Japanese submarine
	Coastal run – 'Barwon' (steam ship) Sydney Melbourne Adelaide Fremantle. 'Corio' was on 'Black & Tan' run – (Newcastle to Geelong with coal, light to Whyalla, iron ore to Newcastle)	'Barwon' 'Corio' 'Black and Tan Run'
109	At end of war – came ashore – shift engineer at Balmain Power Station – too monotonous, so he left, and went on holiday.	Balmain Power Station
	Offered job at Water Board Mechanical Section – on start, was moved to Plant Department . Period in Head Office writing specifications, the Warragamba Dam project as Assistant Plant Engineer (early 1948). Earth moving plant, cable ways, emergency power station. Air compressor station, workshops.	Water Board Plant Department Warragamba Dam
	First lived in tent, and later in barracks. Bought first MG car to travel home at weekends – living with parents.	
155	Medical facilities in camp – met and married one of the nurses (early 1950).	
160	Saw position of Assistant Superintendent Engineer advertised by Howard Smith – applied for and got position in Sydney. Shore-based job, but role as trouble-shooter had him flown to locations in Australia to meet ship. Also in charge of staff of 50 engineers, and ship repair yard. Mainly 9 to 5, with plenty of extra hours.	Howard Smith
179	Living in wife's unit in Bellevue Hill, then bought a house in Gladesville. Hills (wife's maiden name Dorothy Langdon) After Warragamba, wife was nursing sister at BMC, Zetland	Dorothy Langdon BMC Zetland MG TC MG TD
200	Experiences of troubleshooting with Howard Smith Anecdote – MS 'Macedon' – main engine failed with broken timing gear.	Howard Smith MS 'Macedon'

	Dangers of 'getting too friendly' with engineer staff - problems disciplining them.	
255	Institution of Marine Engineers, London – attended Sydney Division lectures. (45 years a member) Benefits – monthly journal 'Marine Engineers' Review' with technical articles on latest developments, and monthly technical meetings. Keeps up to date. Entered Institution directly as Fellow, being holder of Chief Engineer's Certificate	Institution of Marine Engineers 'Marine Engineers Review'
278	After 18 years with Howard Smith – vacancy in Commonwealth Dept of Shipping & Transport – less demanding job, for similar salary– Marine Engineer Surveyor, and Examiner of Engineers.	Commonwealth Department of Shipping and Transport
299	Marine Surveyor – carried out periodic safety surveys of ships, examined and tested safety equipment; investigation after accidents, tonnage measurement of new yachts for registration.	Registry of British Ships, Cardiff UK
318	Inspection of 'Ships of Shame'- unsafe vessels – situation has not improved much over the years. Some of these ships were also potential environmental disasters – eg 'Kirki' off WA coast – bow fell off. Inspections mainly in Sydney, but branches in all major Australian ports.	Ships of Shame 'Kirki'
360	End of Side B	

Tape : IEA SYD : FJ 16 , Side A		
COUNT	**SUBJECT**	**NAMES & KEYWORDS**
000	2- and 4-cycle diesel engines – differences and advantages Today, most main engines are 2-cycle, and auxiliary engines are 4-cycle 4-cycle more fuel-efficient, 2-cycle nearly double the power for a given engine size.	Blast injection
30	Retirement in 1983	
35	Changes in cargo shipping – demise of refrigerated cargo trade to Britain, growth of oil tankers, gas tankers, sophisticated passenger ships. Shrinking of Australian merchant navy to very small size due to foreign competition. Automation resulted in reduction in ships' crews. Much less scope for a career at sea. Improved navigation aids	
66	24-hour watchkeeping in coastal waters – risk of collision with small craft. Problems of visibility from container ships.	
80	Retirement activities – 'you must have a hobby to keep your mind active" - building live steam model locomotives and model ships. Design and build live steam engines.	
100	Travels before retirement – cruises	'Marco Polo' 'Oriana' P&O Line 'Ocean Monarch' Shaw Saville
135	End of Interview	
360	End of Side A	